



IPW

PTO/SB/21 (09-04)

Approved for use through 07/31/2006. OMB 0651-0031  
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

## TRANSMITTAL FORM

(to be used for all correspondence after initial filing)

Total Number of Pages in This Submission

6

Application Number

10/578,504

Filing Date

May 5, 2006

First Named Inventor

Tae Ri Lee

Art Unit

2821

Examiner Name

Attorney Docket Number

ACE-31431

## ENCLOSURES (Check all that apply)

<input type="checkbox"/> Fee Transmittal Form	<input type="checkbox"/> Drawing(s)	<input type="checkbox"/> After Allowance Communication to TC
<input type="checkbox"/> <input type="checkbox"/> Fee Attached	<input type="checkbox"/> Licensing-related Papers	<input type="checkbox"/> Appeal Communication to Board of Appeals and Interferences
<input type="checkbox"/> Amendment/Reply	<input type="checkbox"/> Petition	<input type="checkbox"/> Appeal Communication to TC (Appeal Notice, Brief, Reply Brief)
<input type="checkbox"/> <input type="checkbox"/> After Final	<input type="checkbox"/> Petition to Convert to a Provisional Application	<input type="checkbox"/> Proprietary Information
<input type="checkbox"/> <input type="checkbox"/> Affidavits/declaration(s)	<input type="checkbox"/> Power of Attorney, Revocation	<input type="checkbox"/> Status Letter
<input type="checkbox"/> Extension of Time Request!	<input type="checkbox"/> Change of Correspondence Address	<input type="checkbox"/> Other Enclosure(s) (please identify below):
<input type="checkbox"/> Express Abandonment Request	<input type="checkbox"/> Terminal Disclaimer	
<input checked="" type="checkbox"/> Information Disclosure Statement	<input type="checkbox"/> Request for Refund	
<input type="checkbox"/> Certified Copy of Priority Document(s)	<input type="checkbox"/> CD, Number of CD(s) _____	
<input type="checkbox"/> Reply to Missing Parts/ Incomplete Application	<input type="checkbox"/> Landscape Table on CD	
<input type="checkbox"/> <input type="checkbox"/> Reply to Missing Parts under 37 CFR 1.52 or 1.53		
Remarks		

## SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT

Firm Name

Signature

Printed name

Date

March 14, 2007

Reg. No.

40,288

## CERTIFICATE OF TRANSMISSION/MAILING

I hereby certify that this correspondence is being facsimile transmitted to the USPTO or deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on the date shown below:

Signature

Typed or printed name

Wilma Nuyens

Date

March 14, 2007

This collection of information is required by 37 CFR 1.5. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to 2 hours to complete, including gathering the necessary information for submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.



PTO/SB/08a (05-03)

Approved for use through 07/31/2006. OMB 0651-0031  
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

**Complete if Known**

Substitute for form 1449A/PTO

**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**

(Use as many sheets as necessary)

Sheet

1

of

5

Application Number	10/578,504
Filing Date	May 5, 2006
First Named Inventor	Tae Ri Lee
Art Unit	282-I
Examiner Name	

Attorney Docket Number ACE-31431

**U. S. PATENT DOCUMENTS**

Examiner Initials*	Cite No.	Document Number Number-Kind Code <sup>2</sup> (If Known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
/H.F.		US- 4,609,905	09-02-1986	UZZO	
		US- 4,717,920	01-05-1988	Ohe et al.	
		US- 4,789,866	12-06-1988	Ohe et al.	
		US- 4,804,967	02-14-1989	Ohe et al.	
		US- 4,804,968	02-14-1989	Ohe et al.	
		US- 4,811,024	03-07-1989	Ohe et al.	
		US- 4,823,141	04-18-1989	Ohe et al.	
		US- 4,887,089	12-12-1989	Shibata et al.	
		US- 4,940,991	07-10-1990	Sheriff	
		US- 4,975,713	12-04-1990	Sheriff	
		US- 5,161,255	11-03-1992	Tsuchiya	
		US- 5,300,936	04-05-1994	Izadian	
		US- 5,610,618	03-11-1997	Adrian et al.	
		US- 5,661,651	08-26-1997	Geschke et al.	
		US- 5,717,135	02-10-1998	Fiorletta et al.	
		US- 5,844,523	12-01-1998	Brennan et al.	
		US- 5,926,142	07-20-1999	Raihgeb et al.	
		US- 5,959,584	09-28-1999	Gorham et al.	

**FOREIGN PATENT DOCUMENTS**

Examiner Initials*	Cite No.	Foreign Patent Document Country Code <sup>3</sup> Number "Kind Code <sup>4</sup> " (If Known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	* <sup>5</sup>

Examiner Signature	Date Considered

**EXAMINER:** Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. 1 Applicant's unique citation designation number (optional). 2 See Kinds Codes of USPTO Patent Documents at [www.uspto.gov](http://www.uspto.gov) or MPEP 901.04. 3 Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). 4 For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. 5 Kind of document by the appropriate symbol as indicated on the document under WIPO Standard ST.16 if possible. 6 Applicant is to place a check mark here if English language translation is attached.

The collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is guaranteed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Response times will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.



Substitute for form 1449A/PTO

INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT

(Use as many sheets as necessary)

Sheet

2

of

5

## Complete if Known

Application Number	10/578,504
Filing Date	May 5, 2006
First Named Inventor	Tae Ri Lee
Art Unit	2 8 2 1
Examiner Name	
Attorney Docket Number	ACE-31431

## U. S. PATENT DOCUMENTS

Examiner Initials*	Cite No. <sup>1</sup>	Document Number Number-Kind Code <sup>2</sup> (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
/H.F./		US- 5,959,581	09-28-1999	Fusinski	
		US- 6,011,518	01-04-2000	Yamagishi et al.	
		US- 6,252,498	06-26-2001	Pashayan, Jr.	
		US- 6,292,149	09-18-2001	Endo et al.	
		US- 6,441,728	08-27-2002	Dixit et al.	
		US- 6,448,935	09-10-2002	Fuchs et al.	
		US- 6,609,419	08-26-2003	Bankart et al.	
		US-			
		US-			
/H.F./		US- 2002/0075145	06-20-2002	Hardman et al.	
		US- 2002/0126005	09-12-2002	Hardman et al.	
		US- 2003/0209065	11-13-2003	Fonteneau	
		US- 2003/0217595	11-27-2003	Banzhof et al.	
		US- 2004/0017291	01-29-2004	Hardman et al.	
		US- 2004/0039509	02-26-2004	Breed	
		US- 2004/0130442	08-08-2004	Breed et al.	
		US-			
		US-			

## FOREIGN PATENT DOCUMENTS

Examiner Initials*	Cite No.	Foreign Patent Document Country Code <sup>3</sup> Number-Kind Code <sup>4</sup> (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T <sup>5</sup>
/H.F./		WO 01/07271	02-01-2001	Transense Technologies		

Examiner Signature	/Hongmin Fan/	Date Considered	04/24/2008

\*EXAMINER: Indicate if references considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of the form with next communication to applicant. 1 Applicant's unique citation designation number (optional). 2 See Kinda Codes of USPTO Patent Documents at [www.uspto.gov](http://www.uspto.gov) or MPEP 901.04. 3 Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). 4 For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. 5 Kind of document by the appropriate symbol as indicated on the document under WIPO Standard ST.16 if possible. 6 Applicant is to place a check mark here if English language translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to fix (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.



Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

PTO/SB/08a (08-03)

Approved for use through 07/31/2005. OMB 0651-0031  
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Substitute for form 1449A/PTO

## INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Use as many sheets as necessary)

Sheet

3

of

5

### Complete if Known

Application Number	10/578,504
Filing Date	May 5, 2006
First Named Inventor	Tae Ri Lee
Art Unit	2821
Examiner Name	
Attorney Docket Number	ACE-31431

### U. S. PATENT DOCUMENTS

Examiner Initials*	Cite No. <sup>1</sup>	Document Number Number-Kind Code <sup>2</sup> or known	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
/H.F./		US- 4,163,208	07-31-1979	Merz	
		US- 4,749,993	06-07-1988	Szabo et al.	
		US- 4,970,491	11-13-1990	Saint et al.	
		US- 5,040,561	08-20-1991	Achterholt	
		US- 5,040,562	08-20-1991	Achterholt	
		US- 5,083,457	01-28-1992	Schultz	
		US- 5,228,337	07-20-1993	Sharpe et al.	
		US- 5,289,160	02-22-1994	Fiorletta	
		US- 5,302,939	04-12-1994	Downs et al.	
		US- 5,438,876	08-08-1995	Lewis	
		US- 5,600,301	02-04-1997	Robinson, III	
		US- 5,604,481	02-18-1997	Lin	
		US- 5,581,023	12-03-1996	Handfield et al.	
		US- 5,637,926	06-10-1997	Zedonis	
		US- 5,754,101	05-19-1998	Tsunetomi et al.	
		US- 5,774,048	06-30-1998	Achterholt	
		US- 5,825,285	10-20-1998	Sawafuji	
		US- 5,853,020	12-29-1998	Widner	
/H.F./					

### FOREIGN PATENT DOCUMENTS

Examiner Initials*	Cite No. <sup>1</sup>	Foreign Patent Document Country Code <sup>3</sup> Number <sup>4</sup> Kind Code <sup>5</sup> (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	* <sup>6</sup>

Examiner Signature	/Hongmin Fan/	Date Considered	04/24/2008

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. 1 Applicant's unique citation designation number (optional). 2 See Kinds Codes of USPTO Patent Documents at [www.uspto.gov](http://www.uspto.gov) or MPEP 991.04. 3 Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). 4 For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. 5 Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. 6 Applicant is to place a check mark here if English language translation is provided.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.



Substitute for form 1449A/PTO		<b>Complete if Known</b>		
		Application Number	10/578,504	
		Filing Date	May 5, 2006	
		First Named Inventor	Tae Ri Lee	
		Art Unit	2-821	
		Examiner Name		
Sheet	4	of	5	Attorney Docket Number
ACE-31431				

## INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Use as many sheets as necessary)

U. S. PATENT DOCUMENTS				
Examiner Initials*	Cite No.*	Document Number Number-Kind Code <sup>2</sup> if known	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document
/H.F.		US- 5,939,977	08-17-1999	Monson
		US- 6,005,480	12-21-1999	Banzhof et al.
		US- 6,101,870	08-15-2000	Kato et al.
		US- 6,163,255	12-19-2000	Banzhof et al.
		US- 6,175,302	01-16-2001	Huang
		US- 6,199,575	03-13-2001	Widner
		US- 6,445,286	09-03-2002	Kessler et al.
		US- 6,448,892	09-10-2002	Delaporte
		US- 6,486,771	11-26-2002	Fuller et al.
		US- 6,486,773	11-26-2002	Baille et al.
		US- 6,518,876	02-11-2003	Marquet et al.
		US- 6,534,711	03-18-2003	Pollack
		US- 6,535,116	03-18-2003	Zhou
		US- 6,546,982	04-15-2003	Brown et al.
		US- 6,553,820	04-29-2003	Tsagas et al.
		US- 6,581,449	06-24-2003	Brown et al.
		US- 6,591,671	07-15-2003	Brown
/H.F.		US- 6,612,165	09-02-2003	Juzswik et al.

## FOREIGN PATENT DOCUMENTS

Examiner Initials*	Cite No.*	Foreign Patent Document Country Code <sup>3</sup> Number <sup>4</sup> Kind Code <sup>5</sup> if known	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T <sup>6</sup>

Examiner Signature	/Hongmin Fan/	Date Considered	04/24/2008

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. <sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> See Kinds Codes of USPTO Patent Documents at [www.uspto.gov](http://www.uspto.gov) or MPEP 901.04. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup> Kind of document by the appropriate symbol as indicated on the document under WIPO Standard ST.16 if possible. <sup>6</sup> Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.



Substitute for form 1449A/PTO

INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT

(Use as many sheets as necessary)

Sheet

5

of

5

## Complete if Known

Application Number	10/578,504
Filing Date	May 5, 2006
First Named Inventor	Tae Ri Lee
Art Unit	2821
Examiner Name	
Attorney Docket Number	ACE-31431

## U. S. PATENT DOCUMENTS

Examiner Initials*	Cite No. <sup>1</sup>	Document Number Number-Kind Code <sup>2</sup> (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
/H.F./		US- 6,662,642	12-16-2003	Breed et al.	
		US- 6,662,665	12-16-2003	Huang	
		US- 6,683,537	01-27-2004	Starkey et al.	
		US- 6,729,180	05-04-2004	Sanchez et al.	
		US- 6,738,697	05-18-2004	Breed	
		US- 6,742,386	06-01-2004	Larson	
		US- 6,748,797	06-15-2004	Breed et al.	
		US- 6,756,892	06-29-2004	Konchin et al.	
		US- 6,758,089	07-06-2004	Breed et al.	
		US- 6,761,072	07-13-2004	Burns	
/H.F./		US-			
		US-			

## FOREIGN PATENT DOCUMENTS

Examiner Initials*	Cite No. <sup>1</sup>	Foreign Patent Document Country Code <sup>3</sup> Number-Kind Code <sup>4</sup> (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T <sup>5</sup>

Examiner Signature	/Hongmin Fan/	Date Considered	04/24/2008

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. 1 Applicant's unique citation designation number (optional). 2 See Kinds Codes of USPTO Patent Documents at [www.uspto.gov](http://www.uspto.gov) or MPEP 901.04. 3 Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). 4 For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. 5 Kind of document by the examiner initials as indicated on the document under WIPO Standard ST.16 if possible. 6 Applicant is to place a check mark here if English language translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.